LAW OFFICES OF

ASHEN & LIPPMAN

PATENT, TRADEMARK, COPYRIGHT, UNFAIR COMPETITION, TRAUE-SECRET COMPUTER & HIGH-TECHNOLOGY LAV

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February 28, 2000

Hon. Commissioner of Patents and Trademarks Washington DC 20231

U. S. utility-patent application 08/959,575

filed October 28, 1997 of Rolf Carlson, Ph.D.

"SYSTEM FOR SUPPLYING SCREENED RANDOM

NUMBERS FOR USE IN RECREATIONAL GAMING IN A

CASINO OR OVER THE INTERNET"

our docket xRCa-03

Dear Sir:

Enclosed for filing in this case please find:

- response of 7 typed pages,

one-month time-extension petition,

- our check for \$110, to be applied as indicated below, and

- acknowledgement card for date-stamping and return.

1-month time-extension petition

In event any further fee, other than an issue fee, should become due, or any refund accrue, at any time during the prosecution of this application, you are hereby authorized to proceed, without specific authorization, to charge such fee or credit such refund to our deposit account 12-1639. A duplicate copy of this letter is enclosed.

I HEREBY CERTIFY that this correspondence is being deposited as first-class mail in an envelope addressed to the Commissioner of Patents and Trademarks, Washington DC 20231, on or before FEBRUARY 28, 2000.

Respectfully submitted,

Reg. No. 22,835

GP 2767#

LAW OFFICES OF

# ASHEN & LIPPMAN

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TELEPHONE 818/249-5961 FACSIMILE 818/249-8384 EMAIL P@A-L.COM

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RE: U. S. utility-patent application 08/959,575

filed October 28, 1997 of Rolf Carlson, Ph.D.

MAR 0 8 2000

: "SYSTEM FOR SUPPLYING SCREENED RANDOM

NUMBERS FOR USE IN RECREATIONAL GAMING IN A

CASINO OR OVER THE INTERNET"

our docket xRCa-03

HAR 14 2000
TC-2700 MAIL ROOM

Dear Sir:

UNFAIR COMPETITION, TRADE-SECRET.

COMPUTER & HIGH-TECHNOLOGY LAV

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\$ 110 1-month time-extension petition

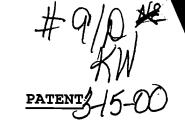
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## UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Rolf Carlson, Ph. D.

Serial No.:

08/959,575

Filed:

October 28, 1997

Title:

"SYSTEM FOR SUPPLYING SCREENED

RANDOM NUMBERS FOR USE IN RECREATIONAL GAMING IN A CASINO OR OVER THE INTERNET"

(twice amended)

Our docket:

xRCa-03

Group Art

Unit:

2767

RECEIVED
HAR 14 2000

Examiner

Douglas Meixlahn

#### **AMENDMENT**

Hon. Commissioner of Patents and Trademarks Washington, D. C. 20231

Sir:

Responsive to the Official

Action dated October 27, please

amend this application as follows.

I hereby certify that this correspondence is being deposited as first-class mail in an envelope addressed to the Commissioner of Patents and Trademarks, Washington, D. C. 20231, on

February

<u> 28</u>, 2000

Peter I. Lippman, Registration 22,835

## IN THE CLAIMS:

Cancel without prejudice claims 19 through 22, and claims 29 through 43.

Please revise claims 17 and 18 to read as indicated below.

// (thrice amended) A system for concurrently operating

multiple games of chance for personal recreation in a casino

or over the Internet; said system [random number generator]

comprising:

a controller;

at least one random number circuit connected to said

controller, said at least one random number circuit generat-

ing a series of <u>numerical</u> pseudo-random numbers, each of size that is substantially not limited to any specific number of digits or places, and providing said series of pseudo-random numbers to said controller; [,]

said series of pseudo-random numbers comprising a <u>multiplicity</u> [plurality] of <u>sequential sets of raw numerical</u>

values that are <u>substantially long-term random or pseudo-random but that are subject to inclusion of short-term runs</u>

or trends in said numbers;

wherein each of said <u>multiplicity of sets</u> [plurality] of pseudo-random numbers <u>in turn is</u> [are] stored by said controller; [,] and

a verifier connected to said controller, said verifier receiving in turn each of said multiplicity of said stored

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22	sets of raw pseudo-random numbers from said controller, said
23	verifier determining whether [verifying that] each of said
24	multiplicity [plurality] of sets of raw pseudo-random numbers
25	<u>in turn:</u>
26	
27	is statistically random or pseudo-random, or
28	
29	instead includes short-term runs or trends;
30	
31	said verifier thereupon routing said sets of raw pseudo-
32	random numbers based on said determining, as follows:
33	
34 •	discarding each of said sets that includes short-term
35	runs or trends, and
36	
37	supplying substantially each of said sets that is veri-
38	fied as [a series of] statistically random or [ver-
39	ified] pseudo-random, for use in driving said con-
40	currently operating multiple games of chance for
41	personal recreation in a casino or over the Inter-
42	<pre>net; and [numbers,]</pre>
43	
44	said sets [series] of statistically verified pseudo-
45	random numbers being provided substantially continuously.

1 18. (twice amended) The system [random number generator] of claim 1/7 further comprising:

a buffer having an output <u>for directing verified pseudo-</u>

random numbers to usages in said concurrently operating

multiple games of chance; [,]

said buffer receiving said series of statistically verified pseudo-random numbers; [,] and

said buffer providing said received series of statistically verified pseudo-random numbers to said output <u>for use</u>
in said concurrently operating multiple games of chance for
personal recreation in a casino or over the Internet.

## IN THE SPECIFICATION:

Carlson / February 28, 2000

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Please again revise the title of the application to read thus: —SYSTEM FOR SUPPLYING SCREENED RANDOM NUMBERS FOR USE IN RECREATIONAL GAMING IN A CASINO OR OVER THE INTERNET—.

#### REMARKS

Applicant wishes to thank Examiner Meislahn for the courtesy of two telephone interviews to explore issues in this case, which is new to the undersigned. The Examiner's patience and cordiality is very greatly appreciated.

The claims have been amended to more emphatically focus this application on the art which was originally intended, namely recreational gaming. Based upon conversation with the Examiner, it appears that this application is neither fish nor fowl: because it contains random-number technology, it was not deemed appropriate subject matter for art units that deal with gaming; and because it deals with gaming it is unfamiliar in the cryptographic arts.

The undersigned respectfully submits that this characteristic of being a "curiosity" in either art ought not result in the application being judged as a matter of pure random-number-generation technology. That would be unfair, because application of sophisticated mathematics to the gaming arts is in itself in rather novel; thus at the outset the combination of advanced RNG techniques with gaming environments confers an element of unusualness upon the invention.

The Applicant respectfully submits that this combination, considered further with specific features absent from

the cited references, renders the invention patentable. In particular please note that the base claim now expressly recites that (1) the claimed system is numerical, not alphabetic, and (2) the random numbers which it supplies are not limited to any particular number of digits (or, equivalently, decimal places). Each one of these characteristics, even considered alone, is believed sufficient to distinguish Vasseur as relied upon.

In addition the claim now specifies that the invention is operating multiple games concurrently, and also that it screens sets of random numbers to be certain that they are not only long-term good for recreationally fair and statistically valid gaming over the long haul, but also that they are short-term good random numbers so as to eliminate even an inaccurate appearance of statistical invalidity. Thus the invention as now recited explicitly discards sets of numbers that fail to measure up to these expectations.

The undersigned is not familiar with cryptography, and it may be that in the crypto art such screening and discarding is known — for purposes, perhaps, of minimizing the vulnerability of encrypted data. Such screening and discarding, however, is believed to be very remote from what a skilled person in the gaming field knows or may imagine heretofore. In this field the person of ordinary skill is not a mathema-

tician or scientist — as may be the case in cryptography — but rather a slot-machine engineer, or a governmental regulatory panel member, or even simply a mechanic. To such artisans this invention is believed to be extremely unobvious.

## Conclusion

In view of the foregoing amendments and remarks, Applicant respectfully requests the Examiner's favorable reconsideration and allowance of all the claims now standing in this case.

It is respectfully requested that, should there appear any further obstacle to allowance of the claims herein, the Examiner telephone the undersigned attorney to try to resolve the obstacle.

Respectfully submitted,

PETER I LIPPMAN

Registration No. 22,835

Attorney for the Applicants

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February 28, 2000

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